

LISTING OF CLAIMS

1. (Currently Amended) An implantable device for repairing a cardiac valve ~~having an annulus and two or more leaflets, wherein a line of coaptation exists at an interface between the leaflets~~, the implantable device comprising:

a ring ~~attachable to the valve~~ designed to attach to an annulus and including an interior, wherein the ring includes a pair of commissural marks separating the ring into an anterior segment and a posterior segment of the cardiac valve and to extend across a line of coaptation at an interface between two or more leaflets of the cardiac valve to maintain proper coaptation of the leaflets; and

a flexible restraining structure affixed to the ring and ~~comprising~~ having one or more restraining members extending ~~inwardly to the ring interior, wherein at least one of the one or more restraining members extends across the ring interior, and wherein the restraining structure establishes a string-like netting extending across the line of coaptation when the ring is attached to the annulus~~ along an opening of the ring from one point on the ring towards another point on the ring, each restraining member being designed to minimize leaflet contact, so as to decrease blood flow turbulence and obstruction, while being spaced from one another in a manner that minimizes an occurrence of a prolapsing segment of either leaflets to slip through between adjacent restraining members.

2-3. Cancelled

4. (Previously Presented) The device of claim 1 wherein one or more of said restraining members are substantially straight.

5. (Withdrawn) The device of claim 2 wherein one or more of said restraining members are curved or bowed.

6. (Previously Presented) The device of claim 1 wherein one or more of said restraining members are flexible.

7. (Original) The device of claim 6 wherein one or more of said flexible restraining members are elastic.
8. (Original) The device of claim 6 wherein one or more of said flexible restraining members are non-elastic.
9. Cancelled
10. (Previously Presented) The device of claim 1 wherein one or more of said restraining members are flat or have a ribbon configuration.
11. Cancelled
12. (Previously Presented) The device of claim 1 wherein one or more of said restraining members are of similar thickness, shape, rigidity and elasticity.
13. (Previously Presented) The device of claim 1 wherein the device comprises at least two restraining members.
14. (Withdrawn) The device of claim 13 wherein the at least two restraining members have different thicknesses.
15. (Withdrawn) The device of claim 13 wherein the at least two restraining members have different shapes.
16. (Withdrawn) The device of claim 13 wherein the at least two restraining members vary in rigidity or elasticity.
17. (Original) The device of claim 13 wherein a primary restraining member extends between a portion of the ring to another portion of the ring.

18. (Withdrawn) The device of claim 17 wherein a secondary restraining member extends between the primary restraining member and the ring.
19. (Withdrawn) The device of claim 15 wherein said restraining structure comprises a plurality of secondary restraining members extending between said primary restraining member and said ring.
20. (Original) The device of claim 13 wherein said at least two restraining members are substantially parallel to each other.
21. (Withdrawn) The device of claim 13 wherein said at least two restraining members are in a non-parallel relationship with each other.
22. (Withdrawn) The device of claim 21 wherein said at least two restraining members form a crisscross pattern.
23. (Withdrawn) The device of claim 21 wherein said at least two restraining members form a zigzag pattern.
24. Cancelled
25. (Withdrawn) The device of claim 24 wherein the plurality of restraining members form a star-like pattern.
26. (Withdrawn) The device of claim 24 wherein the plurality of restraining members form a web-like pattern.
27. (Original) The device of claim 1 wherein said ring has a closed or complete ring configuration.
28. (Original) The device of claim 27 wherein said ring has a D-shaped configuration.

29. (Withdrawn) The device of claim 27 wherein said ring has a circular configuration.
30. (Withdrawn) The device of claim 1 wherein said ring has an open configuration.
31. (Withdrawn) The device of claim 30 wherein said ring has a C-shaped configuration.
32. (Withdrawn) The device of claim 30 wherein said ring has a saddle-shaped configuration.
33. (Withdrawn) A method for repairing a defective cardiac valve having a valve annulus and at least one valve leaflet, comprising the steps of:
accessing the defective cardiac valve;
providing a device comprising a restraining structure; and
implanting said device at the defective cardiac valve wherein said restraining structure is positioned such that said restraining structure restrains the abnormal motion of at least a portion of one valve leaflet.
34. (Withdrawn) The method of claim 33 wherein said restraining structure operatively restrains at least a portion of one valve leaflet from prolapsing during systole.
35. (Withdrawn) The method of claim 33 wherein said restraining structure operatively restrains at least a portion of two or more valve leaflets from prolapsing during systole.
36. (Withdrawn) The method of claim 33 wherein said cardiac valve is the mitral valve and the at least one valve leaflet is the posterior leaflet of the mitral valve.

37. (Withdrawn) The method of claim 33 wherein said cardiac valve is the mitral valve and the at least one leaflet is the anterior leaflet of the mitral valve.
38. (Withdrawn) The method of claim 33 wherein said device further comprises an annuloplasty ring wherein said restraining structure is associated with said annuloplasty ring.
39. (Withdrawn) The method of claim 38 wherein said step of implanting said device comprises attaching said annuloplasty ring to the valve annulus.
40. (Withdrawn) The method of claim 38 wherein said step of implanting said device comprises positioning said restraining structure with respect to said at least one valve leaflet whereby abnormal motion of said at least one valve leaflet is restrained.
41. (Withdrawn) A kit for repairing a defective cardiac valve, said kit comprising a plurality of the device of claim 1.
42. (Withdrawn) The kit of claim 41 wherein said cardiac valve is the mitral valve.
43. (Withdrawn) The kit of claim 41 wherein said devices have varying sizes and/or configurations.
44. (Withdrawn) The kit of claim 41 further comprising one or more of the group consisting of an annulus sizer, a device holder, a valve tester, a suturing device, sutures and instructions for using the devices.
- 45-49. Cancelled
50. (Withdrawn) The device of claim 45 wherein said at least one member is bowed.
- 51-53. Cancelled

54. (Withdrawn) The device of claim 45 wherein said ring has an open or partial ring configuration.

55-57. Cancelled

58. (Withdrawn) A method for repairing a defective cardiac valve having a valve annulus and at least one leaflet, the method comprising the steps of:

accessing the defective cardiac valve;

providing a device comprising a ring configured for attachment to the valve annulus and at least one member extending across at least a portion of the interior of the ring; and

attaching said ring to said valve annulus wherein said at least one member extends above at least a portion of said at least one leaflet.

59. (Withdrawn) The method of claim 58 wherein said cardiac valve is the mitral valve and said at least one leaflet is the posterior leaflet of the mitral valve.

60. (Withdrawn) The method of claim 58 wherein said cardiac valve is the mitral valve and said at least one leaflet is the posterior leaflet of the mitral valve.

61. (Withdrawn) The method of claim 58 wherein said attaching said ring to said valve annulus acts to remodel said valve to annulus to a natural condition.

62. (Withdrawn) The method of claim 58 wherein said ring is flexible.

63. (Currently Amended) An implantable device for repairing a cardiac valve ~~having an annulus and two or more leaflets, wherein a line of coaptation exists at an interface between the leaflets,~~ said device comprising:

a ring configured for attachment to ~~the valve an~~ annulus and including an interior, wherein the ring includes a pair of commissural marks separating the ring into an anterior segment and a posterior segment of the cardiac valve and to extend

across a line of coaptation at an interface between two or more leaflets of the cardiac valve to maintain proper coaptation of the leaflets; and

a plurality of flexible restraining members permanently affixed to the ring and extending inwardly from the ring across the ring interior, and wherein the restraining members establish a string-like netting extending across the line of coaptation when the ring is attached to the annulus along an opening of the ring from one point on the ring towards another point on the ring, the restraining members being designed to minimize leaflet contact, so as to decrease blood flow turbulence and obstruction, while being spaced from one another in a manner that minimizes an occurrence of a prolapsing segment of either leaflets to slip through between adjacent restraining members.